IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A repeater which passes on a communications packet between a first network and a second network, the repeater comprising:

a port number setting section which sets an external port number on the first network for a terminal connected to the second network, in response to an access from the terminal;

a port mapping table where ~~an~~ the set external port number ~~on the first network~~ is stored so as to be associated with an internal IP address and an internal port number of ~~a~~ the terminal connected to the second network;

a controller, which, receiving a communications packet to which the external port number is specified, converts the external port number to the internal port number based on the port mapping table and transfers the ~~internal port number~~ communication packet to the second network using the internal port number;

a timer, which counts an unoccupied time of the external port number by starting to count ~~an port~~ after ~~transfer of a communications packet with the internal port number to which is~~

~~converted from the external port~~ the external port number is stored in the port mapping table; and

a port manager, which, when the unoccupied time of the external port has reached a predetermined time, automatically deletes registration of the external port number that is elapsed in the predetermined time from ~~in~~ the port mapping table ~~when the unoccupied time of the port has reached a predetermined time~~.

2. (Currently Amended) The repeater according to claim 1, wherein the ~~unoccupied~~ predetermined time can be set by an access from a terminal connected to the second network.

3. (Original) The repeater according to claim 1,wherein the port manager monitors the port open time, records the longest time and sets a time equal to or above the longest time as a threshold value of the unoccupied time.

4. (Currently Amended) A repeater which passes on a communications packet between a first network and a second network, the repeater comprising:

a port number setting section which sets an external port number on the first network for a terminal connected to the second network, in response to an access from the terminal;

a port mapping table where ~~an~~ the set external port number on the first network is stored so as to be associated with an internal IP address and an internal port number of ~~a~~ the terminal connected to the second network;

a controller, which, receiving a communications packet to which the external port number is specified, converts the external port number to the internal port number based on the port mapping table and transfers the ~~internal port number~~ communication packet to the second network using the internal port number;

a timer, which counts an unoccupied time of ~~an~~ said external port by starting to count after ~~transfer of a communications packet having the internal port number to which is converted from the external port~~ the external port number is stored in the port mapping table; and

a port manager, which, determining that a communications packet has not been received for a predetermined time, transmits a presence check packet to the terminal connected to the second network and which, receiving no response, automatically deletes a registration of the external port number that is elapsed in the predetermined time in the port mapping table.

5. (Currently Amended) A repeater which passes on a communications packet between a first network and a second network, said repeater comprising:

a port number setting section which sets an external port number on the first network for a terminal connected to the second network, in response to an access from the terminal;

a port mapping table where ~~an~~ the set external port number on said first network is stored so as to be associated with an internal IP address and an internal port number of ~~a~~ the terminal connected to said second network;

a controller, which, receiving a communications packet to which the external port number is specified, converts the external port number to the internal port number based on the port mapping table and transfers the ~~internal port number~~ communication packet to the second network using the internal port number;

a timer, which counts the time for periodically transmitting a presence check packet to the terminal connected to the second network; and

a port manager, which transmits a presence check packet to the terminal connected to the second network at the time counted by the timer and which, receiving no response, automatically

deletes registration of the external port number that is elapsed in the predetermined time from said port mapping table.

Claim 6 (Cancelled).

7. (Currently Amended) The repeater according to any one of claims 1, 4, or 5 ~~through 6~~, wherein the repeater is a router which performs dynamic port forwarding of an IP packet in accordance with the UPnP Standard.

Claim 8 (Cancelled).

9. (Currently Amended) An inter-network repeating method which passes on a communications packet between a first network and a second network, the method comprising the steps of:

determining that there is an access from a terminal connected to the second network to a main device, setting an external port number on the first network that corresponds to the terminal;

creating a port mapping table where ~~an~~ the set external port number on the first network is stored so as to be associated with an internal IP address and an internal port number of ~~a~~ the terminal connected to the second network;

receiving a communications packet to which the external port number is specified;

converting the external port number to the internal port number based on the port mapping table;

transferring the internal port number to the second network;

counting an unoccupied time of the port after transfer of a communications packet with the internal port number to which is converted from the external port; and

automatically deleting registration of the external port number from the port mapping table when the unoccupied time of the port has reached a predetermined time.

Claims 10 and 11 (Cancelled).

12. (Currently Amended) An inter-network repeating method which passes on a communications packet between a first network and a second network, the method comprising steps of:

determining that there is an access from a terminal connected to the second network to a main device, setting an external port number on the first network that corresponds to the terminal;

creating a port mapping table where ~~an~~ the external port number on the first network is stored so as to be associated with

an internal IP address and an internal port number of ~~a~~ the terminal connected to the second network;

receiving a communications packet to which the external port number is specified, converting the external port number to the internal port number based on the port mapping table and transferring the internal port number to the second network;

counting the unoccupied time of the port after transfer of a communications packet with the internal port number to which is converted from the external port; and

determining that a communications packet has not been received for a predetermined time, transmitting a presence check packet to the terminal connected to the second network and, receiving no response, automatically deleting registration of the external port number that is elapsed in the predetermined time in the port mapping table.

13. (Currently Amended) An inter-network repeating method which passes on a communications packet between a first network and a second network, the method comprising steps of:

determining that there is an access from a terminal connected to the second network to a main device, setting an external port number on the first network that corresponds to the terminal;

creating a port mapping table where ~~an~~ the set external port number on said first network is stored so as to be associated with an internal IP address and an internal port number of ~~a~~ the terminal connected to the second network;

receiving a communications packet to which the external port number is specified, converting the external port number to the internal port number based on the port mapping table and transferring the internal port number to the second network;

counting the time for periodically transmitting a presence check packet to the terminal connected to the second network; and

transmitting a presence check packet to the terminal connected to the second network at the time counted and, receiving no response, automatically deleting a registration of the external port number that is elapsed in the predetermined time from the port mapping table.

Claims 14 and 15 (Cancelled).

16. (New) The repeater according to claim 1, wherein the registration of the external port number is an internal IP address and internal port number that corresponds to the external port number.

17. (New) The repeater according to claim 9, wherein the registration of the external port number is an internal IP address and internal port number that corresponds to the external port number.